Nemati, Babak

Atty. Ref: 101078.0001US3

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-70 (canceled)

71. (New) An apparatus for an *in vivo* ophthalmologic procedure comprising:

a pore forming portion that is configured to create an opening in a conjunctiva, wherein the opening is configured to allow delivery of a clarifying agent to a sclera disposed below the conjunctiva;

wherein the clarifying agent enhances optical transparency of the sclera to thereby form an area of clarified sclera;

a delivery portion coupled to the pore forming portion, wherein the delivery portion is configured to allow dispensing the clarifying agent from the delivery portion to the sclera through the opening;

an optical portion coupled to at least one of the pore forming portion and the delivery portion and configured such that light emitted by the optical portion passes through the conjunctiva or opening to an area within or below the area of clarified sclera; and

wherein the apparatus is configured such that the opening is formed, the clarifying agent is delivered, and the light is emitted when the apparatus is in a position proximal to the sclera.

- 72. (New) The apparatus of claim 71 wherein the pore forming portion and the optical portion are coaxially arranged relative to each other.
- 73. (New) The apparatus of claim 71 wherein the optical portion comprises at least one of a confocal microscope and a device that provides spectral information from a fluid in the clarified sclera.

Nemati, Babak

Atty. Ref: 101078.0001US3

- 74. (New) The apparatus of claim 71 wherein the pore forming portion employs mechanical force or laser irradiation to create the opening.
- 75. (New) The apparatus of claim 71 wherein the clarifying agent is selected from the group consisting of diatrizoate meglumine acid, glycerol, and glucose.
- 76. (New) The apparatus of claim 71 wherein the light is visible light.
- 77. (New) The apparatus of claim 71 wherein the light has a wavelength and energy sufficient for photocoagulation or photodynamic therapy.
- 78. (New) An apparatus for an *in vivo* medical procedure comprising:
 - a driver portion that is configured to drive a clarifying agent through a permeability barrier to a tissue disposed below the permeability barrier;
 - wherein the clarifying agent enhances optical transparency of the tissue to thereby form an area of clarified tissue;
 - a non-invasive optical portion coupled to the driver portion and configured such that light emitted by the optical portion passes through the permeability barrier to an area within or below the area of clarified tissue; and
 - wherein the apparatus is configured such that the clarifying agent is driven through the permeability barrier and the light is emitted to the area when the apparatus is in a position proximal to the tissue disposed below the permeability barrier.
- 79. (New) The method of claim 78 wherein the driver portion is configured to drive the clarifying agent across the permeability barrier by iontophoresis, electroporation, application of acoustic pressure, or application of a chemical enhancer, a carrier agent, or a penetrating solvent.
- 80. (New) The method of claim 78 wherein the permeability barrier comprises a conjunctiva.
- 81. (New) The method of claim 78 wherein the light is delivered to an area below the area of clarified target tissue.

Nemati, Babak

Atty. Ref: 101078.0001US3

- 82. (New) The method of claim 78 wherein the light has a wavelength and energy sufficient for photocoagulation or photodynamic therapy.
- 83. (New) The method of claim 78 wherein the permeability barrier comprises a stratum corneum.
- 84. (New) The method of claim 78 wherein the optical portion is further configured to acquire an analyte signal from an analyte disposed within the area of clarified tissue.
- 85. (New) The method of claim 78 wherein the clarifying agent is selected from the group consisting of diatrizoate meglumine acid, glycerol, and glucose.
- 86. (New) An apparatus for an in vivo dermatological procedure comprising:
 - a pore forming portion that is configured to create an opening in a stratum corneum, wherein the opening is configured to allow delivery of a clarifying agent to a tissue disposed below the stratum corneum;
 - wherein the clarifying agent enhances optical transparency of the tissue to thereby form an area of clarified tissue;
 - a delivery portion coupled to the pore forming portion, wherein the delivery portion is configured to allow dispensing the clarifying agent from the delivery portion to the tissue through the opening;
 - a non-invasive optical portion coupled to at least one of the pore forming portion and the delivery portion and configured such that visible light emitted by the optical portion passes through the stratum corneum or opening to an area within or below the area of clarified tissue; and
 - wherein the apparatus is configured such that the opening is formed, the clarifying agent is delivered, and the light is emitted when the apparatus is in a position proximal to the tissue disposed below the stratum corneum.

Nemati, Babak

Atty. Ref: 101078.0001US3

- 87. (New) The apparatus of claim 86 wherein the pore forming portion and the optical portion are coaxially arranged relative to each other.
- 88. (New) The apparatus of claim 86 wherein the visible light has a wavelength of between 350 nm to 750 nm.
- 89. (New) The apparatus of claim 86 wherein the clarifying agent is selected from the group consisting of diatrizoate meglumine acid, glycerol, and glucose.
- 90. (New) The apparatus of claim 86 wherein the clarifying agent further includes an enhancing agent selected from the group consisting of a chemical enhancer, a carrier agent, and a penetrating solvent.